

Amendments to the Specification:

Please amend the specification with the following replacement paragraphs at the locations indicated in the application:

Page 4, paragraph beginning at line 5:

Similarly, the economic environment changes with the introduction of new goods and services, new production technologies, new legislation and the extinction of older goods and services. Similarly, changes in the supply and demand for materials also ~~effects~~ affect the economic environment. For example, the contingent value to buyer and seller of goods or services, the cost of producing the next kilowatt of power for a power generating plant, and the value of the next kilowatt of power to a purchaser ~~effect~~ affect the economic environment. Accordingly, the firm's supply chain management, job shop scheduling and organization structure must be flexible and adaptive to account for the effect of changes to the firm's economic environment.

Page 4, paragraph beginning at line 24:

Accordingly, there exists a need for an operations management system and method that represents operations and/or parts with devices wherein these devices search for related operations and/or parts and perform transformations on these related operations and/or parts to create new operations and/or parts. In other words, there exists a need for a system and method for operations management where parts and/or operations are represented by devices that determine how they interact with one another.

Page 5, paragraph beginning at line 20:

The present invention[[s]] includes a system for performing operations management wherein said each device performs the further steps of:

Page 24, paragraph beginning at line 30:

Use of  $p$ ,  $\tau$ , or patches aids adaptive search on rugged landscapes because each by itself causes the evolving system to ignore some of the constraints some of the time. Judicious balancing of ignoring some of the constraints some of the time with search over the landscape optimizes the balance between “exploitation” and “exploration”. In particular, without the capacity to ignore some of the constraints some of the time, adaptive systems tend to become trapped on local, very sub-optimal peaks. The capacity to ignore some of the constraints some of the time allows the total adapting system to escape badly sub-optimal peaks on the fitness landscape and, thereby, enables further searching. In the preferred embodiment, the present invention tunes  $p$ ,  $\tau$ , or patches either alone or in conjunction with one another to find the proper balance between stubborn exploitation hill climbing and wider exploration searching.

Page 25, paragraph beginning at line 14:

The optimal character of either  $\tau$  alone or patches alone is such that the total adaptive system is poised slightly in the ordered regime, near a phase transition between order and chaos. See, e.g., “At Home in the Universe” by Stuart Kauffman, Chapters 1, 4, 5, and 11, the contents of which are herein incorporated by reference, and “The Origins of Order” by Stuart Kauffman, Oxford University Press, 1993, Chapters 5 and 6, the contents of which are herein incorporated by reference.